Application No. 10/815,567 Attorney Docket No. MP1534

FHFGD Ref. No.: 10368.0003-000000

CENTRAL FAX GENTER

DEC 0 8 2008

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A method comprising:

monitoring one or more sensor outputs, each of the one or more sensor outputs measuring a power consumption property of a chip; and

recording a <u>total</u> time that at least one of the <u>each of the one or more</u> sensor outputs indicates an existence of the power consumption property at a <u>corresponding</u> predetermined value.

- 2. (Original) The method of claim 1, wherein the power consumption property of the chip comprises temperature, and the temperature comprises a temperature range including one or more temperatures.
- 3. (Currently amended) The method of claim 2, wherein each sensor output corresponds to a <u>corresponding</u> temperature range, and indicates the <u>an</u> existence of <u>a temperature of the chip falling within the corresponding temperature range as the one or more temperatures measured at the corresponding sensor output.</u>
- 4. (Currently amended) The method of claim 1, wherein the power consumption property of the chip comprises voltage drop, and the voltage drop range comprises a voltage drop range including includes one or more voltage drops.

- 5. (Currently amended) The method of claim 4, wherein each sensor output corresponds to a <u>corresponding</u> voltage drop range, and each sensor output indicates the <u>an</u> existence of a voltage drop <u>falling within the corresponding voltage drop range as</u> measured at the corresponding <u>sensor</u> output.
- 6. (Currently amended) A method for analyzing operation of a chip executing an application, the method comprising:

monitoring one or more parts of the application;

obtaining event data from a sensor attached to the chip, the event data including one or more times that one or more sensor outputs of the sensor indicates an existence of a power consumption property of the chip being at least a corresponding predetermined value as measured at the one or more sensor outputs; and

for at least one a first part of the one or more parts of the application being monitored, correlating the event data with one or more instruction addresses associated with the first part parts of the application.

- 7. (Original) The method of claim 6, wherein the power consumption property comprises temperature.
- 8. (Original) The method of claim 6, wherein the power consumption property comprises voltage drop.
- 9. (Currently amended) An apparatus for analyzing operation of a chip executing an application, the apparatus comprising:

circuitry capable of:

monitoring one or more parts of the application;

obtaining event data from a sensor attached to the chip, the event data including one or more times that one or more sensor outputs of the sensor indicates an existence of a power consumption property of the chip being at least a corresponding predetermined value as measured at the one or more sensor outputs; and

for at least one <u>a first part</u> of the <u>one or more</u> parts of the application <u>being</u> <u>monitored</u>, correlating the event data with <u>one or more instruction addresses associated</u> <u>with the first part parts</u> of the application.

- 10. (Original) The apparatus of claim 9, wherein the power consumption property of the chip comprises temperature, and the temperature comprises a temperature range including one or more temperatures.
- 11. (Currently amended) The apparatus of claim 10, wherein each sensor output corresponds to a <u>corresponding</u> temperature range, and indicates the <u>an</u> existence of <u>a temperature of the chip falling within the corresponding temperature range as the one or more temperatures</u> measured at the corresponding sensor output.
- 12. (Original) The apparatus of claim 9, wherein the power consumption property of the chip comprises voltage drop, and the voltage drop comprises a voltage drop range including one or more voltage drops.
- 13. (Currently amended) The apparatus of claim 12, wherein each sensor output corresponds to a <u>corresponding</u> voltage drop range, and each sensor output indicates the <u>an</u> existence of a voltage drop <u>falling</u> within the <u>corresponding</u> voltage drop <u>range</u> as measured at the corresponding <u>sensor</u> output.

14. (Currently amended) A system for analyzing operation of a chip executing an application, the system comprising:

circuitry on a first node, the circuitry connected to the chip and capable of:

monitoring one or more parts of the application;

obtaining event data from a sensor attached to the chip, the event data including one or more times that each of one or more sensor outputs of the sensor indicates an existence of a power consumption property of the chip being at least a corresponding predetermined value as measured at the one or more sensor outputs; and

for at least one <u>a first part</u> of the <u>one or more</u> parts of the application, correlating the event data with <u>one or more instruction addresses associated with</u> the <u>first part</u> parts of the application; and

a performance analyzer on a second node, the performance analyzer communicatively coupled to the circuitry on the first node, the performance analyzer to use the correlated information.

- 15. (Previously presented) The system of claim 14, wherein the power consumption property of the chip comprises temperature, and the temperature comprises a temperature range including one or more temperatures.
- 16. (Currently amended) The system of claim 15, wherein each sensor output corresponds to a temperature range, and indicates the <u>an</u> existence of <u>a temperature of the chip falling within the corresponding temperature range as the one or more temperatures measured at the corresponding sensor output.</u>

- 17. (Currently amended) The system of claim 14, wherein the power consumption property of the chip comprises voltage drop, and wherein the voltage drop comprises a voltage drop range includes including one or more voltage drops.
- 18. (Currently amended) The system of claim 17, wherein each sensor output corresponds to a voltage drop range, and each sensor output indicates the <u>an</u> existence of a voltage drop <u>falling within the corresponding voltage drop range as</u> measured at the corresponding <u>sensor</u> output.
- 19. (Currently amended) An article comprising a A machine readable medium memory having storing machine-accessible instructions, the instructions when executed by a machine, result in the following cause the machine to:

monitor monitoring one or more parts of the instructions;

obtain obtaining event data from a sensor attached to the machine, the event data including one or more times that each of one or more sensor outputs indicates an existence of a power consumption property of a chip being at least a predetermined value; and

<u>correlate</u> for at least one of the parts of the instructions, correlating the event data with the <u>one or more</u> parts of the instructions <u>being monitored</u>.

20. (Currently amended) The article memory of claim 19, wherein the power consumption property of the chip comprises a temperature range, and wherein the temperature range includes one or more temperatures.

- 21. (Currently amended) The article memory of claim 20, wherein each sensor output corresponds to a <u>corresponding</u> temperature range, and indicates the <u>an</u> existence of <u>a temperature of the machine falling within the corresponding temperature range as the one or more temperatures</u> measured at the corresponding sensor output.
- 22. (Currently amended) The article memory of claim 19, wherein the power consumption property of the chip comprises voltage drop range, and wherein the voltage drop comprises a voltage drop range including includes one or more voltage drops.
- 23. (Currently amended) The article memory of claim 22, wherein each sensor output corresponds to a voltage drop range, and each sensor output indicates the an existence of a voltage drop falling within the corresponding voltage drop range as measured at the corresponding sensor output.
- 24. (Currently amended) A method for analyzing operation of a chip based on an executing application, the method comprising:

monitoring one or more portions of the executing application;

obtaining one or more instruction addresses corresponding to the one or more portions;

correlating the monitored one or more portions of the executing application corresponding to the one or more instruction addresses obtained with power consumption data obtained by a sensor on the chip; and

storing data corresponding to the correlating.